

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY PRODUCT CONTROL SECTION 11805 SW 26 Street, Room 208 T (786) 315-2590 F (786) 315-2599 www.miamidade.gov/economy

ES Windows, LLC 10653 N.E. Quaybridge Ct. Miami, FL 33138

Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami-Dade County) and/ or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "1600" Aluminum Fixed Window - S.M.I.

APPROVAL DOCUMENT: Drawing No. W05-46, titled "Series 1600 Aluminum Fixed Window (S.M.I.)", sheets 01 through 05 of 05, prepared by AL-Farooq Corporations, dated 09/09/05, with revision "F" dated 08/22/14, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P. E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and Expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, Barranquilla, Colombia, America Latina, series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/ or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA No. 12-0308.39 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by Jaime D. Gascon, P. E.

(MIAMIDADE COUNTY)
APPROYED

J. CASON 1730/15 NOA No. 14-0923.09 Expiration Date: March 31, 2016 Approval Date: February 05, 2015

Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

- 1. Manufacturer's die drawings and sections. (Submitted under NOA's No.'s 05-1213.01 and 09-1008.03)
- 2. Drawing No. W05–46, titled "Series 1600 Aluminum Fixed Window (S.M.I.)", sheets 01 through 05 of 05, prepared by AL–Farooq Corporations, dated 09/09/05, with revision "F" dated 08/22/14, prepared by Al–Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

B. TESTS

- 1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202–94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Small Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Forced Entry Test, per ASTM F 588-04/07 and per FBC 2411 3.2.1, TAS 202-94
 - 7) Deglazing Force Test, per ASTM E 987–88(R2009) and per FBC 2411 3.2.1, TAS 202–94
 - 8) Operation Force Test, per ASTM D 2256–02(R2008) and per FBC 2411 3.2.1, TAS 202–94

along with marked-up drawings and installation diagram of a fixed window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. FTL-5695, dated 07/20/09, signed and sealed by Julio E. Gonzalez, P.E.

(Submitted under NOA No. 09-1008.03)

- 2. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202–94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Small Missile Impact Test per FBC, TAS 201–94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Forced Entry Test, per ASTM F 588-04/07 and per FBC 2411 3.2.1, TAS 202-94
 - 7) Deglazing Force Test, per ASTM E 987–88(R2009) and per FBC 2411 3.2.1, TAS 202–94
 - 8) Operation Force Test, per ASTM D 2256–02(R2008) and per FBC 2411 3.2.1, TAS 202–94

along with marked-up drawings and installation diagram of a fixed window, prepared by Hurricane Engineering & Testing, Inc., Test Reports No.'s **HETI-05-1449** and HETI-**05-1954**, dated 04/28/05 and 05/02/05, both signed and sealed by Ivonne Ghia, P. E.

(Submitted under previous NOA No. 05-1213.01)

Jaime D. Gascon, P. E.

Product Control Section Supervisor

NOA No. 14-0923.09

Expiration Date: March 31, 2016 Approval Date: February 05, 2015

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

C. CALCULATIONS

- 1. Anchor verification calculations and structural analysis, conformance to, complying with FBC-2010 and with FBC 5th Edition (2014), prepared by Al-Farooq Corporation, dated 08/14/14, signed and sealed by Javad Ahmad, P.E.
- 2. Glazing complies with ASTM E1300–98/09

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. 11–0624.02 issued to E.I. DuPont DeNemours & Co., Inc. for their "DuPont Sentry Glass® Interlayer" dated 05/26/10, expiring on 01/14/17.
- 2. Notice of Acceptance No. 13–0129.27 issued to E.I. DuPont DeNemours & Co., Inc. for their "DuPont Butacite® PVB Interlayer" dated 04/11/13, expiring on 12/11/16.

F. STATEMENTS

- 1. Statement letter of conformance to, complying with FBC 5th Edition (2014), and of no financial interest, dated 08/14/14, signed and sealed by Javad Ahmad, P. E.
- 2. Statement letter of no financial interest, conformance and compliance with the FBC-2010, dated 02/24/12, signed and sealed by Javad Ahmad, P. E.
- 3. Distributor Agreement between, E.S. Windows Energia Solar S.A., Barranquilla, Colombia and E.S. Windows, LLC, Miami, Florida, U.S.A., dated 10/20/10, signed by Carla Garcia Torrente and by Andres Chamorro, respectively.
- 4. Laboratory compliance letter for Test Report No. FTL-5695, issued by Fenestration Testing Laboratory, Inc., dated 07/20/09, signed and sealed by Julio E. Gonzalez, P. E. (Submitted under previous NOA No.09-1008.03)
- 5. Proposal issued by Product Control, dated 06/12/08, signed by Jaime D. Gascon, P. E. (Submitted under previous NOA No.09–1008.03)
- 6. Laboratory compliance letter for Test Reports No.'s HETI-05-1449 and HETI-05-1954, issued by Hurricane Engineering and Testing, Inc., dated 04/28/05 and 05/02/05, both signed and sealed by Ivonne Ghia, P. E. (Submitted under previous NOA No.05-1213.01)
- 7. Proposal issued by Product Control, dated 02/14/06, signed by Ishaq Chanda, P. E. (Submitted under previous NOA No. 05–1213.01)

G. OTHERS

1. Notice of Acceptance No. 12–0308.39, issued to ES Windows, LLC, for their Series "1600 Aluminum Fixed Window – S.M.I.", approved on 05/31/12 and expiring on 03/31/16.

Jaime D. Gascon, P. E.

Product Control Section Supervisor

NOA No. 14-0923.09

Expiration Date: March 31, 2016 Approval Date: February 05, 2015

SERIES-1600 ALUMINUM FIXED WINDOW

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF FIXED/FIXED OR FIXED WITH OTHER MIAMI-DADE COUNTY APPR'D WINDOWS USING MIAMI-DADE COUNTY APPROVED MULLIONS IN BETWEEN. LOWER DESIGN PRESSURE FROM WINDOWS OR MULLION APPROVAL WILL APPLY TO ENTIRE SYSTEM.

DESIGN LOAD RATING FOR THESE WINDOWS TO BE AS PER CHARTS SHOWN ON SHEET 2.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

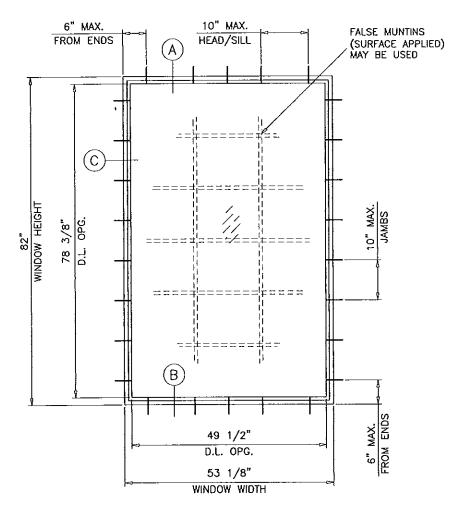
WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.

ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS, ANCHORS EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.

A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE FLORIDA BLDG. CODE.



TYPICAL ELEVATION

TESTED UNIT

DAYLITE OPENINGS: D.L.O. HEIGHT = WINDOW HEIGHT - 3.625" D.L.O. WIDTH = WINDOW WIDTH -3.625"

> THESE WINDOWS ARE RATED FOR SMALL MISSILE IMPACT. MIAMI-DADE COUNTY APPROVED IMPACT RESISTANT SHUTTERS REQUIRED FOR INSTALLATIONS UP TO 30 FT. OF GRADE. SHUTTERS NOT REQD. FOR INSTALLATIONS ABOVE 30 FT. OF GRADE.

PRODUCT REVISED as complying with the Florida Building Code Acceptance No Expiration Date 23/3 Miami Dade Product Control

Engr: JAVAD AHMAD CMIL FLA. PE # 70592 C.A.N. 3538

SERIES-1600 ALUMINUM FIXED WINDOW (\$		E.S. WINDOWS, LLC.	5220 N.W. 72 AVE. BAY #4	MINNI FI 32186]U(IEL. (305) 624-///5 FAX. (305) 624-/
	by description	UPDATED FOR 2007 FBC	REV. PER BCCO COMMENTS	UPDATED TO 2010 FBC	UPDATED TO 2014 FBC	
revisions:	no date by	C 08,18,09	D 02.09.10	E 02.24.12	F 08.22.14	
date: 09-09-05		scale: 1/2"=1'-0"		dr. by: HAMID		chk. by:
d	ro	ıwi	ng		no	٥.

W05 - 46

sheet 1 of 5

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL (305) 264-8100 FAX. (305) 262-6978

		DESIG	N LOAD	CAPACITY	- PSF		
WINDO	W DIMS.	GLASS 1	TYPE 'A'	GLASS 7	TYPE 'B'	GLASS 3	TYPE 'C'
WIDTH	HEIGHT	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)	EXT.(+)	1NT.()
18"		90.0	140.0	100.0	140.0	100.0	140.0
24"		90.0	140.0	100.0	140.0	100.0	140.0
30"		90.0	140.0	100.0	140.0	100.0	140.0
36"	70#	90.0	132.8	100.0	140.0	100.0	140.0
42"	36"	90.0	132.8	100.0	140.0	100.0	140.0
48"		90.0	132.8	100.0	140.0	100.0	140.0
54"		90.0	127.9	100.0	140.0	100.0	140.0
60°		90.0	121.9	100.0	140.0	100.0	140.0
18"		90.0	140.0	100.0	140.0	100.0	140.0
24"		90.0	140.0	100.0	140.0	100.0	140.0
30"		90.0	140.0	100.0	140.0	100.0	140.0
36"	48"	90.0	132.8	100.0	140.0	100.0	140.0
42"	40	90.0	113.8	100.0	126.5	88.1	123.3
48*		90.0	99.6	100.0	110.7	77.1	107.9
54*		90.0	99.6	100.0	110.7	77.1	107.9
60"		90.0	90.0	90.0	90.0	90.0	90.0
18"		90.0	140.0	100.0	140.0	100.0	140.0
24"		90.0	140.0	100.0	140.0	100.0	140.0
30"		90.0	136.5	100.0	140.0	100.0	140.0
36"	co*	90.0	121.9	100.0	140.0	100.0	140.0
42"	60"	90.0	112.5	100.0	126.5	88.1	123.3
48"		90.0	90.0	90.0	90.0	90.0	90.0
54"		88.5	88.5	90.0	90.0	88.5	88.5
60 *		79.7	79.7	88.5	88.5	79.7	79.7
18"		90.0	140.0	100.0	140.0	100.0	140.0
24"		90.0	140.0	100.0	140.0	100.0	140.0
30*		90.0	129.3	100.0	140.0	100.0	140.0
36"	70*	90.0	113.7	100.0	133.0	100.0	140.0
42"	72*	90.0	90.0	90.0	90.0	90.0	90.0
48"		90.0	90.0	90.0	90.0	90.0	90.0
54"		88.5	88.5	90.0	90.0	88.5	88.5
60"		_	_	88.5	88.5	79.7	79.7

		DESIG	N LOAD	CAPACITY	- PSF		
WINDO	y dims.	GLASS 7	TYPE 'A'	GLASS 7	TYPE 'B'	GLASS 1	LAbe ,c,
WIDTH	HEIGHT	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)	EXT.(+)	1NT.()
18"		90.0	140.0	100.0	140.0	100.0	140.0
24"		90.0	140.0	100.0	140.0	100.0	140.0
30"	84"	90.0	124.6	100.0	140.0	100.0	140.0
36"	04	90.0	90.0	90.0	90.0	90.0	90.0
42"		90.0	90.0	90.0	90.0	90.0	90.0
48"		-	-	90.0	90.0	90.0	90.0
18"		90.0	140.0	100.0	140.0	100.0	140.0
24"		90.0	140.0	100.0	140.0	100.0	140.0
30"	90"	90.0	122.8	100.0	140.0	100.0	140.0
36"	90	90.0	90.0	90.0	90.0	90.0	90.0
42"		90.0	90.0	90.0	90.0	90.0	90.0
48"		-	-	90.0	90.0	90.0	90.0
18"		90.0	140.0	100.0	140.0	100.0	140.0
24"		90.0	140.0	100.0	140.0	100.0	140.0
30"	96"	90.0	90.0	90.0	90.0	90.0	90.0
36"	!	90.0	90.0	90.0	90.0	90.0	90.0
42"		_	_	90.0	90.0	90.0	90.0
18"		90.0	140.0	100.0	140.0	100.0	140.0
24"	108"	90.0	140.0	100.0	140.0	100.0	140.0
30"	100	90.0	90.0	90.0	90.0	90.0	90.0
36"		90.0	90.0	90.0	90.0	90.0	90.0
18"		90.0	140.0	100.0	140.0	100.0	140.0
24"	120"	90.0	90.0	90.0	90.0	90.0	90.0
30"	120	90.0	90.0	90.0	90.0	90.0	90.0
36"		_		90.0	90.0	90.0	90.0

NOTE: GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS).

	27000 00 (0 020.	00010),
5/8" MIN. TYP.	3/16" HEAT STREN'D .035" INTERLAYER SENTRYGLAS BY 3/16" TEMP. SILICONE DOW CORN 5 GLASS TYPE 'C'	R 'DUPONT'

taus

Miami Dade Product Control

WIDTH HEIGHT EXT.(+) 1NT.(-) EXT.(+) 1NT.(-) EXT.(+) 1NT.(-) 19-1/8" 90.0 140.0 100.0 140.0 100.0 140.0 26-1/2" 100.0 140.0 100.0 140.0 90.0 140.0 140.0 100.0 140.0 100.0 37" 90.0 140.0 48" 90.0 140.0 100.0 140.0 100.0 140.0 140.0 53-1/8" 90.0 140.0 100.0 140.0 100.0 19-1/8" 100.0 140.0 90.0 140.0 140.0 100.0 26-1/2" 100.0 100.0 140.0 90.0 140.0 140.0 38-3/8" 100.0 140.0 37" 90.0 129.2 140.0 100.0 124.6 100.0 138.4 135.0 48" 90.0 135.0 53-1/8" 90.0 124.6 100.0 138.4 96.4 19-1/8" 140.0 90.0 140.0 100.0 140.0 100.0 26-1/2" 90.0 140.0 100.0 140.0 100.0 140.0 37" 50-5/8" 90.0 129.2 100.0 140.0 100.0 140.0 107.9 90.0 100.0 110.7 77.1 48" 99.6 90.0 100.0 104.9 102.3 53-1/8 94.4 73.1 19-1/8" 140.0 90.0 140.0 100.0 140.0 100.0 26-1/2" 100.0 140.0 140.0 90.0 140.0 100.0 121.9 100.0 140.0 100.0 140.0 37" 58" 90.0 48" 90.0 90.0 90.0 90.0 90.0 90.0 53-1/8" 90.0 90.0 90.0 90.0 90.0 19-1/8" 90.0 140.0 100.0 140.0 100.0 140.0 26-1/2" 140.0 100.0 140.0 100.0 140.0 90.0 140.0 37" 63" 90.0 117.5 100.0 137.4 100.0 90.0 48" 90.0 90.0 90.0 90.0 53-1/8" 90.0 90.0 90.0 90.0 90.0 19-1/8" 140.0 100.0 90.0 140.0 140.0 100.0 26-1/2" 100.0 140.0 90.0 140.0 140.0 100.0 140.0 100.0 129.3 37" 74-1/4" 90.0 110.5 100.0 90.0 48" 90.0 90.0 90.0 90.0 90.0 53-1/8" 90.0 90.0 90.0 90.0 90.0 90.0

DESIGN LOAD CAPACITY - PSF

GLASS TYPE 'B'

GLASS TYPE 'C'

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL (305) 264-8100 FAX. (305) 262-6978

(305)

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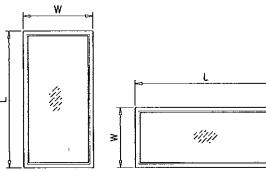
LLC. BAY

1600 ALUMINUM

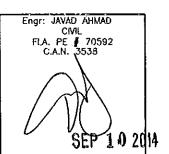
E.S. WINDOWS, LL 5220 N.W. 72 AVE. F MIAMI, FL. 33166 TEL. (305) 624-7775 F.

GLASS TYPE 'A'

WINDOW DIMS.



WIDTH AND LENGTH DIMENSIONS CAN BE ORIENTED VERTICALLY OR HORIZONTALLY AS SHOWN ABOVE.

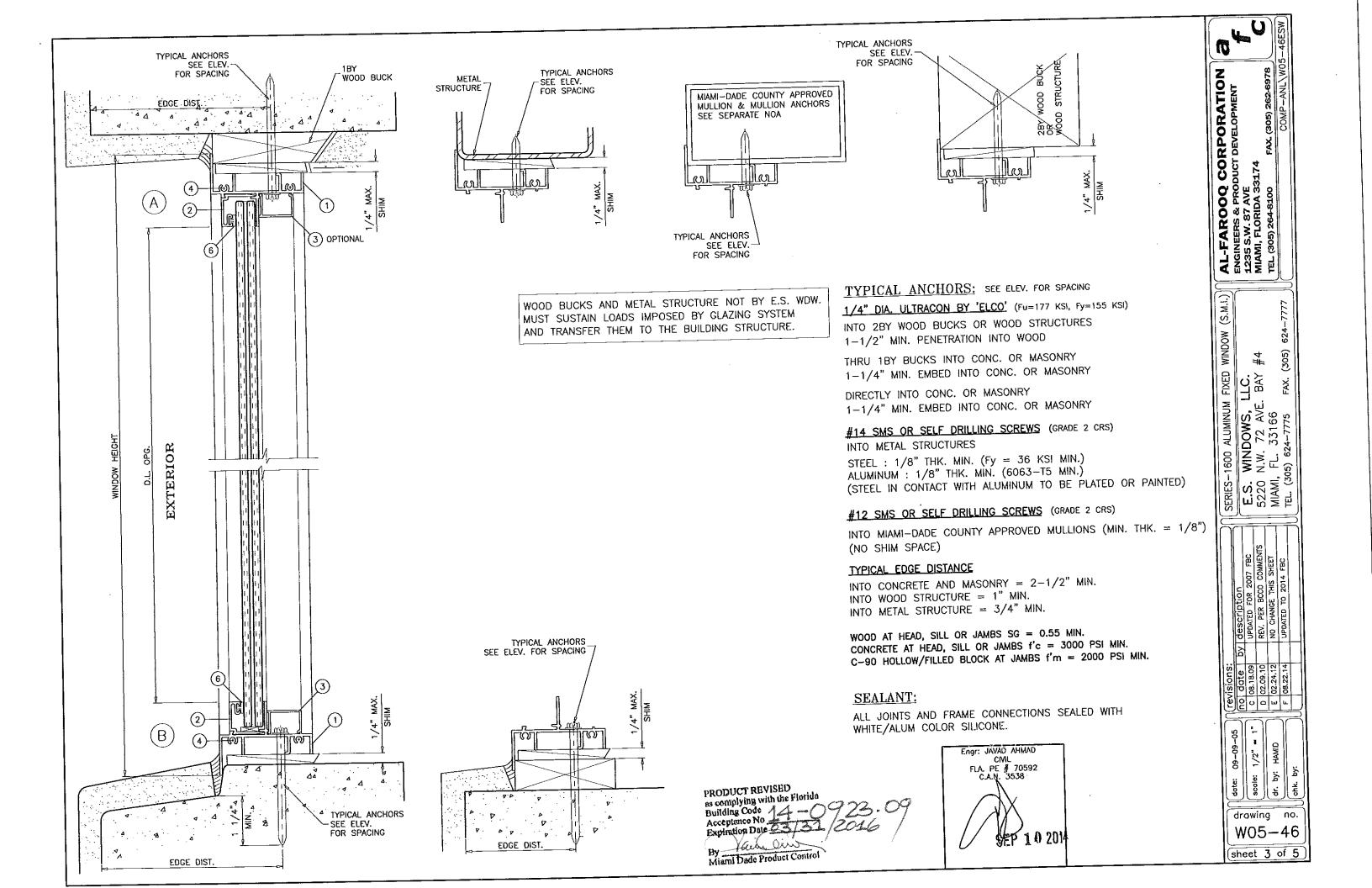


Engr: JAVAD AHMAD	
CIVIL	
FLA. PE # 70592 C.A.N. ,3538	
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SEP 10 20	14

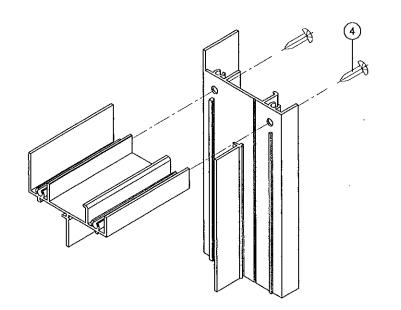
GLASS TYPE 'A' GLASS TYPE 'B' GLASS TYP	5/8" MIN. TYP.	3/16" HEAT STREN'D GLASS .090" INTERLAYER BUTACITE PVB BY 'DUPONT' -3/16" HEAT STREN'D GLASS SILICONE DOW CORNING 795/983	3/16" HEAT STREN'D GLASS O90" INTERLAYER BUTACITE PVB BY 'DUPONT' 3/16" TEMP. GLASS SILICONE DOW CORNING 795/983	3/16" HEAT .035" SENTR .3/
		GLASS TYPE 'A'	GLASS TYPE 'B'	GLASS TYP

GLAZING OPTIONS

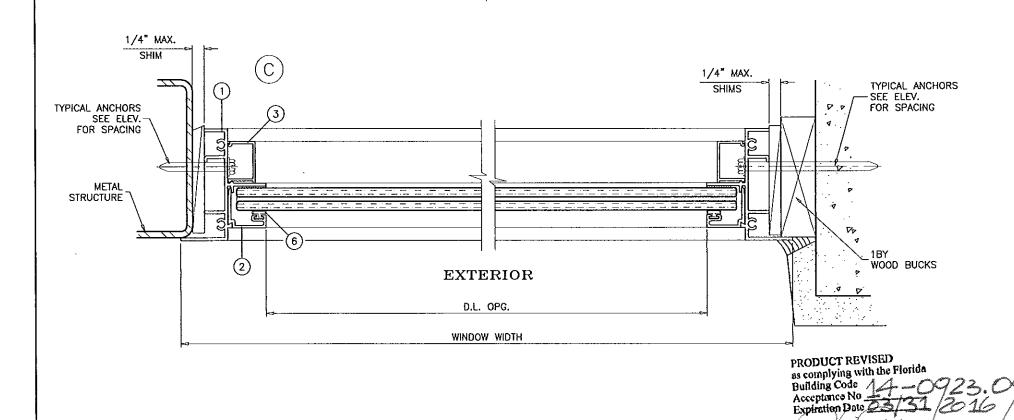
date date 08.18.09 02.09.10 02.24.12 08.22.14 စ်ပြုပြုမှု မ HAMID drawing no. W05 - 46sheet 2 of 5



ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	ES1501	4	WINDOW FRAME	6063-T6	-
2	ES1106	4	GLAZING STOP	6063-T5	_
3	ES1502	4	FRAME COVER (OPTIONAL)	6063-T5	_
4	#8 X 1 [™]	2/ CORNER	ASSEMBLY SCREWS	CRS	PH SMS .
5	_	2/ LITE	SETTING BLOCKS, 7/16" X 3/16" X 3-1/2" LONG	EPDM	DUROMETER 75±5 SHORE A
6	27-425	AS REQD.	GLAZING GASKET	EPDM	DUROMETER 60±5 SHORE A
7	ES1505	_	FLUSH FRAME ADAPTER	6063-T5	OPTIONAL



TYPICAL CORNER DETAIL

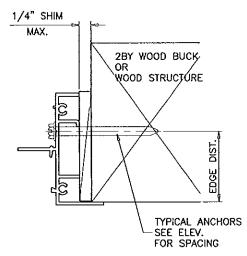


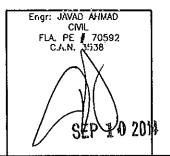
TYPICAL ANCHORS
SEE ELEV. FOR SPACING

WINDOW WIDTH

MIAMI-DADE COUNTY APPROVED MULLION-SEE SEPARATE NOA

WINDOW WIDTH





Miami Dade Product Control

date: 09-09-05	<u>وا</u>	revisions:		
22	၉	date	ি	by I description
scale: 1/2" = 1"	ပ	C 08.18.09		UPDATED FOR 2
	٥	02.09.10		REV, PER BCCC
ir. by: HAMID	ш	E 02.24.12		NO CHANGE TH
	ъ	F 08.22.14		UPDATED TO 20
ihk. by:				

drawing W05 - 46sheet 4 of 5

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL (305) 264-8100 FAX. (305) 262-6978

SERIES-1600 ALUMINUM FIXED WINDOW (S.M.I.)

(305)

E.S. WINDOWS, LLC. 5220 N.W. 72 AVE. BAY # MIAMI, FL. 33166 TEL. (305) 624-7775 FAX. (30

